

The Official Newsletter of the Fox River Radio League 99 Years of continuous service to our communities

1924 \_\_\_\_\_ 2023

Who We Are

#### President: Terry Todd W9AUV

<u>Vice President</u>: Eve Schneider W9EVE

Secretary: Art Shuter NN9I

<u>Treasurer</u>: Dan Harmon WA9YKK

Director :1 Ruben Noceda K9ARN

Director: 2 Jim Brady W9JB

Director 3 Paul Mitchell KC9SEB

Director 4 John Greusel

<u>Past President</u>: Dennis Barfuss W9HI

Programs: Paul Mitchell KC9SEB

Education / VE: Jim BradyW9JB

License Trustee (W9CEQ): Kermit Carlson, W9XA

License Trustee (W9NE): Denny Barfuss W9HI

Newsletter Editor / PR: Jerry Chapman N9JLC

Webmaster: Mark Van Daele K9MEV

Membership Database: Chris Kennell, KC9BKS

Net Coordinator: Curt Sauer, W9YNP About Us

The Fox River Radio League, Inc. is a general interest Amateur Radio club serving the central Fox River Valley area in Illinois. Club records indicate the club has been in existence since at least 1924, and it has functioned continuously ever since. We are an ARRL Special Service Club, an Illinois not-for-profit corporation, and a 501(c)(3) tax exempt organization as specified in Federal IRS Statutes.

We sponsor training classes for those seeking a new or upgraded Amateur Radio license, license examination sessions, and participation in various local Public Service events. Our membership covers a broad variety of interests - if you have a specialized amateur radio interest, you will likely find camaraderie with one or more of our club members.

We meet on the 2nd Tuesday of every month at Bethany Lutheran Church, located at 8 S. Lincoln St. in Batavia, III. The meeting begins at 7:30 PM and includes a short business portion, social time and a program presentation of interest.

Meetings are open to the public. Anyone interested in the amateur radio hobby are invited to attend. Family members are welcome.

This badly damaged American flag was found by a recovery worker in the World Trade Center debris at the Staten Island recovery site.

Thank you to The Smithsonian Institution



Fox River Radio League

Mailing Address: P. O Box 673 Batavia, IL 60510-0673

Email: info@frrl.org

Website: http://www.frrl.org



Welcomes		Members
Call Sign	Name	License
KD9NZV	Charles Bedrosian	General
WA9OJD	Leonard Bednarczyk	Amateur Extra
KD9NPR	Thomas Lebryk	General
WA9E	Roberto Beltramelli	Amateur Extra
KC9QIO	John Olesinski	General
N9CHA	Gregory Braun	Amateur Extra

Our

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President

Todd





Minutes of the Regular Meeting of the <u>General Membership</u> of the Fox River Radio League (FRRL) an Illinois not-for-profit Corporation

The August 8, 2023 meeting of the Fox River Radio League was conducted at Bethany Lutheran Church in Batavia, IL. There were 46 members in attendance and 7 on zoom.

The meeting was called to order at 19:30 CST by President Terry Todd, W9AUV.

#### **Board Members and Directors Present**

President, Terry Todd W9AUV Secretary, Art Shuter NN9I Treasurer, Dan Harmon WA9YKK Director 1, Ruben Noceda K9ARN Director 2, Jim Brady W9JB Director 3, Paul Mitchell KC9SEB Director 4, John Greusel KC9OJV Past President, Denny Barfuss W9HI

**Minutes**: Acceptance of the July 11, 2023 Membership meeting minutes as printed in the ArcOver were approved by the membership. Motion: Curt W9YNP 2<sup>nd</sup>: Robert W9MZ

Treasurer's Report: Dan WA9YKK, reported the account bank balances as of 8/8/23.

Bylaws committee: Dan WA9YKK: Vote on updated Bylaws will be taken at the September meeting of the FRRL.

Eve W9EVE 100<sup>th</sup>: Banquet will be Sept 24,2024



August 8th minutes contd:

**Reports:** 

Director 1 Ruben K9ARN RPTR'S: Repeaters working well and Echolink is up and running.

**Director 3: Club Activities Paul Mitchell KC9SEB**: Considering doing POTA at Silver Springs State Park. He will send out sign up sheet.

Director 4 Technical John KC9OJV: John is working on filters for field day.

Database Manager Mike Urso K9FE: We now have 145 members.

**Education/VE: Denny W9HI** - Extra class starting in September at Messenger Library in North Aurora. Still in need of some instructors. Dan WA9YKK has ordered study manuals for the class.

Field Day Report: Denny W9HI and Pat KB9ANL: Final score was 8195 points.

Upcoming events: Newsletter deadline August 20<sup>th</sup>.

Program: Paul KC9SEB will do a presentation on Allstar.

Adjournment: Motion to adjourn: Mike K9FE 2<sup>nd</sup> Marty N9NTM Meeting adjourned at 20:05 CST.

Respectfully submitted, *Art Shuter* – *NN9I* FRRL Secretary



August 2023 FRRL member meeting..

Picture courtesy of Roberto WA9E







Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2 Extra License Class 9a-1230p
3 INFORMAL ALL OPR NET 1900		5 1900 FRRL BOD Meeting 1930 FRRL 2m Net	6	7	8	9 Extra License Class 9a-1230p
10 INFORMAL ALL OPR NET 1900	PATHOT DAY	12 1930 FRRL Membership Meeting No Net	13	14	15	16 Extra License Class 9a-1230p
17 INFORMAL ALL OPR NET 1900	18 CW NET 28.150 2000 SSB NET 28.720 2030	19 1930 FRRL 2m Net	20 Newsette Deadline	21 VE Testing	22	23 Extra License Class 9a-1230p
24 INFORMAL ALL OPR NET 1900	25 CW NET 28.150 2000 © SSB NET 28.720 2030	26 1930 FRRL 2m Net	27	28	29	30 Extra License Class 9a-1230p
				MEMBER MEETING BETHANY LUTHERAN CHURCH 8 SOUTH LINCOLN ST. BATAVIA IL		
WCRA 2m Net 8pm 145.31 -6 107.2	VARA 2m Net 8pm 146.79 -6 107.2	FRRL 2m Net 7:30pm 147.21 +6 103.5	Kane County ARES 2m Net 6:30pm 145.47 -6 103.5	Northern Illinois ARRL 70cm Net 7:30pm 444.875 +5MHz, 114.8	₩28.150, N SS	W Net /onday 8PM 6B Net onday 8:30PM

Page5



Looking to purchase an FRRL name tag ?? Look no longer contact Dan Harmon

dharmon@ameritech.net

For a mere \$17 you can be a proud owner an FRRL name tag !!









#### Who would be interested in a FRRL POTA type Activity?

Thinking of a Saturday activity



Where: Silver Springs State Park - https://pota.app/#/park/K-1024









There will be a SignupGenius Link provided - to follow.

# FRRL Ham Radio POTA!

Director3@Int.org

Please review the available slots below and click on the button to sign up. Thank you!

@ Related files 🌏



# Thank-You

Feedback and or questions? >> director3@frrl.org







### Using Computer Audio Plug-Ins with Transceivers Tom Lebryk (KD9NPR)



All HF transceivers have a way to get audio out to speakers or another audio input device. In the case of my Kenwood TS-590S, I have used the speaker output to a cheap Behringer UCA-202 RCA to USB converter (it has its own volume control to keep it from overloading, plus I am too lazy to wire up something for the weird 13-pin port in the back of the Kenwood). Newer radios will have a standard USB port to get audio to your computer.

My Windows 10 Sounds Properties sees this audio as "3-USB Audio CODEC" which I have enabled on a physical USB hub with individual power switches for each port. Thanks to Steve (K1GMM) and his YouTube channel (K1GMM Green Mountain Maniac) for describing how to use Windows plugins for processing either RX or TX audio. I am only focusing on the RX part of things for now.

For my simpler needs, I have chosen to use VST Host. I downloaded it right from Steve's website:

#### https://kc1egu.wixsite.com/essb-ham-radio/copy-of-icom-ic7300-others

I then downloaded a number of plugins suggested by Steve on his web site ("More" Menu pulldown, DAW's/ VST DOWNLOADS). Each VST file can be copied to a central directory/folder on your computer and all read from the same place inside the VST Host. Most of these are Windows types but there are some for Linux if that is something you use. I found that VST Host does NOT like a write- protected directory, so it and the VST's reside in my top-level Documents directory.

My resulting "chain" of VST's process the audio from my 3-USB Audio CODEC in a sequential order:

- <u>ModernAmplifier</u> (a Limiter to keep strong signals from overloading the audio)
- <u>ReaFir</u> (an interesting "Subtract" feature where I cut down on the "roar" of frequencies around 800-1200 Hz)
- <u>Bertom Denoiser Pro</u> (EXCELLENT static & background noise reducer)
- <u>TDR Nova</u> (a powerful, well-made Compessor & DynamicEQ combo)
- <u>Sennheiser-AMBEO-Orbit</u> (a Binaural soundscape).

If latency becomes a problem, it might be possible to link the outputs of one or two of these VST apps to the final output. Problem is that when trying to shave-off QRM or other sonic effects, the order in which the audio is processed affects how effective will be the final quality of the audio. There are ASIO drivers which can reduce latency but I will need to do more research into this.

You can check out Steve's Green Mountain Maniac YouTube channel and see for yourself what can be done with sound processing for Ham Radio!

K1GMM-VST HOST RXDAP CONFIGURATION video

Cheers and 73's, Tom



### The 3rd annual Masonic Lodges on the Air

(MLotA), an amateur radio special event, will occur on Saturday, September 23, 2023, from locations across the United States. The event is open to all amateur radio operators. The idea for the event grew from the realization that many Freemasons also have a love for amateur radio. The Fulton County Amateur Radio Club and Ohio's Fulton Lodge #248 first hosted the event in 2021. The mission is to promote fraternal bonds within the ranks for Free and Accepted Masonic lodges and its many amateur radio operators, who are also brothers in the fraternity while encouraging contact with amateur radio operators around the state, county and world. The event will take place from 10:00 AM - 6:00 PM ET, on 80 - 40 - 20 -15, and 10 meters SSB. Amateur radio participants are asked to honor all band plans, and all contacts must be on the phone portion of the bands. Stations may be contacted once on each band. Complete contest rules and more information can be found at <u>cgmorelight.com/rules</u>.

Visit the ARRL Special Event Stations database at <u>www.arrl.org/special-event-stations</u>. to find other on-the-air events and commemorations.

### 66 On the Air Special Event

Planning is underway for the 2023 Route 66 On the Air Special Event on September 9 - 17. This will be the 24th year of the event has been running. It was started by the Northern Arizona DX Association (NADXA) and is now coordinated by the Citrus Belt Amateur Radio Club (CBARC) in San Bernardino, California. Twenty-one special event stations along the route from Santa Monica, California, to Chicago, Illinois, are expected to participate in 9 days of operating opportunities. The special event celebrates the history of the Mother Road that began in 1926, when US Highway 66 was established. It was the first major improvement to the link between the west coast and the nation's heartland. Through stories, songs, and TV shows, the highway came to symbolize the freedom of the open road, inspiring many to see America in its entirety. The demise of Route 66 began in the 1950s, as construction began on the new interstate highway system. US Route 66 was officially decommissioned in 1986, but today, small portions of the highway still exist in several states. More information on the event will be available soon at the <u>Citrus Belt Amateur Radio Club</u> (CBARC) website or on their <u>Facebook</u> page.

### Hurricane Watch Net Seeks Bilingual Net Control Operators

The Hurricane Watch Net (HWN) is looking for new members who are willing to train to become Net Control Operators. HWN is especially interested in recruiting bilingual operators who are fluent in Spanish and English or French/Creole and English. Net Control

responsibilities can entail hours of duty to ensure all received ground-truth weather reports are forwarded directly to the National Hurricane Center in Miami.

Those interested in learning more can visit the HWN Net Control Information web page at, <u>https://hwn.org/about-us/ncs\_info.html</u>.



### ARRL Membership Dues Increase

The ARRL Board of Directors approved increasing the regular membership dues rate to \$59 a year starting January 1, 2024.



See <u>https://www.arrl.org/2024-dues-rates</u> for dues rates and fees are effective January 1, 2024.

Mark your calendar. On September 24 at the Radio Expo Belvidere hamfest there will be two ARES meetings (9:30 and 10:30) at the ARRL tables. This is the final of the three (Central, South & North) ARES meetings. All are welcome to attend.

For Information contact Thom Beebe at <a href="https://www.thom.eebe1@gmail.com">thombeebe1@gmail.com</a>

Vicky Whitaker, KD9BAU, ARRL Illinois Section Public Information Coordinator



### STARVED ROCK



### NATIONALS

Fox River Radio Leage was represented at the Starved Rock Nationals in Ottowa.

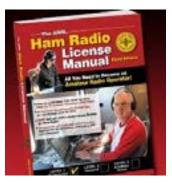












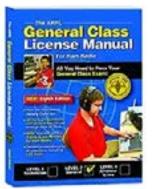
**Technician Class** 

Wednesday Evenings 6:30 P.M. to 9:30 P.M.

Start: TBD End:



Tech & General classes are done on Zoom. The Meeting Link to be distributed prior to the class.



**Generl Class** 

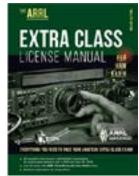
Thursday Evenings 6:30 P.M. to 9:30 P.M.

> Start: TBD End:

Extra Class

Saturday Mornings 9:00.AM. to 12:30 P.M.

Start: September 2 End: November 18



EXTRA classes are held in person at:



Extra class licenses.

The Fox River Radio League (FRRL) presents regular training classes focused toward new Amateurs interested in gaining their Technician class license or upgrading to the General and

These are free courses where you will learn everything you need to receive or upgrade to the appropriate FCC radio license.

The textbook for the class will be the official ARRL License Manual. Books are available for purchase via the club at a discounted rate by emailing <u>education [at] frrl.org</u>.

Classes are instructor-led, and you can expect engaging conversations to ensue around the topics of discussion.

In addition to our regularly scheduled bi-monthly testing we will be scheduling a dedicated VE session after discussing best availability with the class participants. For more information on VE sessions, please see <u>VE Test Sessions</u>.

We are in need of

### Instructors

If you are willing to teach a section or two contact education@frrl.org

Please Note that Tech & General classes are 9 weeks long.. Extra classes are 12 weeks long. You can contact Dennis Barfuss at: <u>W9HI@arrl.net</u> if you have any questions



Students should read the material in advance of the class. Also bring an inexpensive calculator like a TI-30 x and a notebook and pencil or pen.

## 2023 Extra Class Syllabus

DATE	STUDY CHAPTER	CHAPTER TITLE	STUDY	THINGS TO LEARN
09/02/2023	Chapter 1	Introduction	1-1 to 1-16	The Extra Class License and Amateur Radio Extra Class Overview Volunteer Testing
09/02/2023	Chapter 2	Operating Practices	2-1 to 2-12	General Operating Amateur Satellites
09/09/2023	Chapter 3	Rules and Regs	3-1 to 3-22	Operating Standards Station Restrictions Station Control Amateur Satellite Service Volunteer Examiner Pgm Miscellaneous Rules
09/16/2023	Chapter 6	Electrical Principles	6-1 to 6-24	Amplifiers Signal Processing, Phased locked loops Modulators
09/23/2023	Chapter 7	Radio Measurements and Performance	7-1 to 7-27	Test Equipment Receiver Performance Interference and Noise
09/30/2023	Chapter 5	Components and Building blocks	5-1 to 5-26	Semiconductor Devices Optoelectronics Digital Logic
10/07/2023	Chapter 4	Electrical Priciples	4-1 to 4-22	Radio Mathematics Electrical and Magnetic Fields Principles of Circuits
10/14/2023	Chapter 4	Electrical Priciples	4-22 to 4-38	Reactive Power and Power Factor Resonant circuits Q of Circuits
10/21/2023	Chapter 6	Electrical Principles	6-25 to 6-43	Digital Signal Processing and Software Defined Radios (SDR) Filters and Impedance Matching Power Supplies
10/28/2023	Chapter 8	Modulation, Protocolls, and Modes	8-1 to 8-23	Modulation Systems Digital Protocols and Modes Amateur Television
11/04/2023	Chapter 11	Safety	11-1 to 11-9	Hazardous materials RF Exposure Grounding and Bonding
11/11/2023	Chapter 10	Topics in Radio Propagation	101 to 10-17	Electromagnetic Waves Solar Effects HF Propagation VHF/UHF/Microwave Propagation
11/18/2023	Chapter 9	Antennas and feedlines	9-1 to 9-42	Basics of Antennas Practical Antennas Antenna Systems Transmission Lines Antenna Design



### **Chicago Marathon Looking For Operators**

For 15 years, the ham radio community has supported the Bank of America Chicago Marathon with critical health and welfare traffic.

135 ham radio ops from around the country participate in this large public event.

We still have a few openings for the fall event on Sunday October 8, 2023.

This is a great way to show our community how ham radio serves and delivers.

Come join us. To register, please use Google form link below and sign up. We will follow up with more details.

Our work has been recognized by the organizers and several observing agencies for our professionalism, teamwork and commitment.

We serve the 3000 medical volunteers and the 45,000 runners who will challenge themselves with this event.

Be part of the team! Put your skills to the test.

2023 Ham Radio Chicago Marathon Com Team Register





I am selling my IC-756Pro II at this time.

It is in good working condition and complete.

I comes with a XGGComms Digimode-4 USB CAT & Digital interface and a Cover

I am asking \$625.

Thank You!

Rob Potthoff

rpotthoff@cncwds.com





This is <u>NOT</u> a picture of the actual radio being sold but a likeness of...



I am selling an unused/new in box MFJ-269D HF/VHF/UHF antenna analyzer surplus to my needs. 3/2023 build date \$450 from MFJ. (They have since lowered the price!)It's still in the plastic so I'd prefer to leave it as is. \$323 for FRRL members. Open to trades.

*Kurt KD9SUV* kd9suv@gmail.com

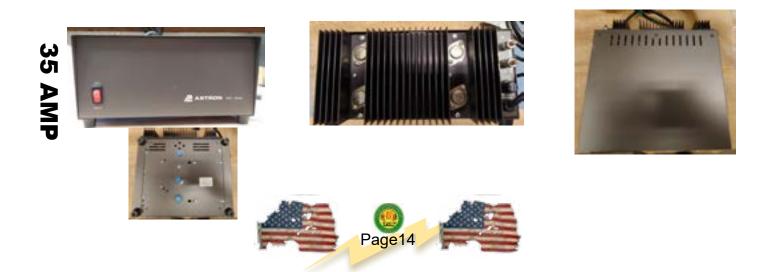


I have an Astron RS-35A -35Amp power supply for sale-\$150 OBO pictures attached. I have an Astron RS-10A -10Amp power supply for sale- \$55 OBO pictures attached. I live in Geneva. Contact info-email-LSB0453@gmail.com and cell-630.209.7712 Thank you

73,Len







### VE Testing

The FRRL, in conjunction with the ARRL VEC, sponsors regular amateur examinations the third Thursday of every March, April, May and June. Ad-hoc sessions are planned during major events and will be added to the schedule here as well.

Upcoming Testing Schedule:

September 21, 2023 November 16, 2023

Testing Location: Geneva Lutheran Church 301 S 3rd St, Geneva, IL 60134

No Walk-ins. All events subject to COVID-19 venue availability and restrictions. Please pre-register by <u>emailing</u> or calling Dan Harmon 630-272-1768

Please also be sure to bring:

- Photo identification
- Your FCC generated FCC Registration Number (FRN).
- The fee of \$15.00. (The FRRL receives no portion of this fee.)

- If upgrading bring your original FCC HAM Radio License (or the documentation you received) and a photocopy of your license.

If you have questions about the testing program, please email the Chairman at: ve@frrl.org

### Illinois Traffic Net



You can also participate in one (or all) of the Illinois Traffic Nets. Everyone is welcome with or without traffic. The nets are the North Central Phone Net, Daily (M-F) at 7 a.m. local time, on 3912 kHz LSB; the Illinois Phone Net, Monday – Friday at 4:45 p.m. local time, on 3857 kHz LSB and on Sunday at 8 a.m. on 3940 kHz; and the Illinois Sideband Net, Daily at 6 p.m. local time, on 3905 kHz LSB.

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September 1 - 3 | <u>Shelby Hamfest</u>, hosting the ARRL North Carolina Section Convention, Shelby, North Carolina



September 10 | ARRL <u>Southern New Jersey Section Convention and Hamfest</u>, Mullica Hill, New Jersey

September 22 - 23 | <u>HRO Superfest</u>, hosting the ARRL Wisconsin State Convention, Milwaukee, Wisconsin

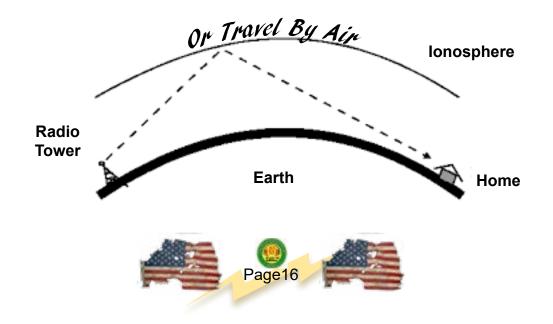


September 23 | <u>Red River Radio Amateur's 2023 Hamfest</u>, sponsoring the ARRL Dakota Division Convention, West Fargo, North Dakota



September 23 | <u>Spokane HAMFEST</u>, sponsoring the ARRL Washington State Convention, Spokane Valley, Washington











September 16-17 – Midwest Superfest, Chillicothe, IL

Sponsor: Peoria Area Amateur Radio Club

Website: https://www.w9uvi.org/midwest-superfest-2023



09/24/2023 - Radio Expo Location: Belvidere, IL Type: ARRL Hamfest Sponsor: Chicago FM Club Website: <u>http://chicagofmclub.org</u>



October 14 – Sedalia Hamfest 2023, Sedalia, MO Sponsor: Sedalia Pettis Amateur Radio Klub Website: http://www.WA0SDO.ORG

November 4 – SSARC/RARC 2023 Hamfest, Belton, MO Sponsor: Southside ARC, Raytown ARC Website: https://southsidearc.net/hamfest2023/





### Calling all newly licensed hams.

Remember the old Radio Shack slogan "You've got questions, We've got answers"?

Well, I know new hams have a lot of questions and those of us that have been hams for a while have the answers.

I will be adding a new segment to our Tuesday Night Net called "ask Elmer" If you have a question about ham radio, ask it on the air and someone will give you the answer over the air.

Now, for this to work properly we need lots of questions and lots of people who know the answers.

Don't be afraid to ask a simple or "stupid" question, we all had them when we started. Would you like to be an "Elmer" without getting out of your chair? Well, this is the opportunity you have been waiting for.

I want to invite all the club members to check-in to the net and either ask a question or provide an answer.

You never know what you might learn or what fun you will have if you don't join the net. For those who may need a reminder, The net meets on our club 2-meter repeater (147.21 MHz, 103.5 Hz PL tone) Every Tuesday at 7:30PM except on our meeting nights.

Hope to hear you on the net soon.

73, Curt W9YNP



#### The Radio Amateur's Code

The Radio Amateur is...

CONSIDERATE... He never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL...He offers loyalty, encouragement and support to other amateurs, local clubs, the IARU Radio Society in his country through which Amateur Radio in his country is represented nationally and internationally.

PROGRESSIVE... He keeps his station up to date. It is well build and efficient. His operating practice is above reproach.

FRIENDLY... He operates slowly and patiently when requested; offers friendly advice and counsel to the beginner; kind assistance, cooperation and consideration for the interests of others. These are the marks of the amateur spirit.

BALANCED... Radio is a hobby, never interfering with duties owed to family, job, school or community.

PATRIOTIC... His station and skills are always ready for service to country and community

...adapted from the original Amateur's Code, Written by Paul M Segal, W9EEA, in 1928

O John Devoldere 0N4UN and Mark Demeuleneere 0N4WW

Taken from: Ethics and Operating Procedures for the Radio Amateur.

### BRING BACK "RADIO IN THE PARK"

Harry Jones K9DXA" started "Radio in the Park" years ago. His idea was take your radio out to a local park and set it up and operate. Since we can't have any thing big, just take your rig, wear your mask, set up an antenna, radio and have fun.



The idea of this is bring ham radio to the public. Make a small sign with your name, call sign, and please add FRRL also. Would like some photo of your operation. May get someone to take a picture of you operating. Will try to get your picture into the news letter. Please send a short report to me at my FRRL address. <u>Director3@frrl.org</u>

Dave K9wdb











There are plenty of volunteer organizations that could use your radio skills.



The Amateur Radio Emergency Service® (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment, with their local ARES leadership, for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization is eligible to apply for membership in ARES. Training may be required or desired to participate fully in ARES. Please inquire at the local level for specific information. Because ARES is an amateur radio program, only licensed radio amateurs are eligible for membership. The possession of emergency-powered equipment is desirable, but is not a requirement for membership.

### **ARES**

Every licensed amateur, regardless of membership in ARRL or any other local or national organization is eligible to apply for membership in ARES.

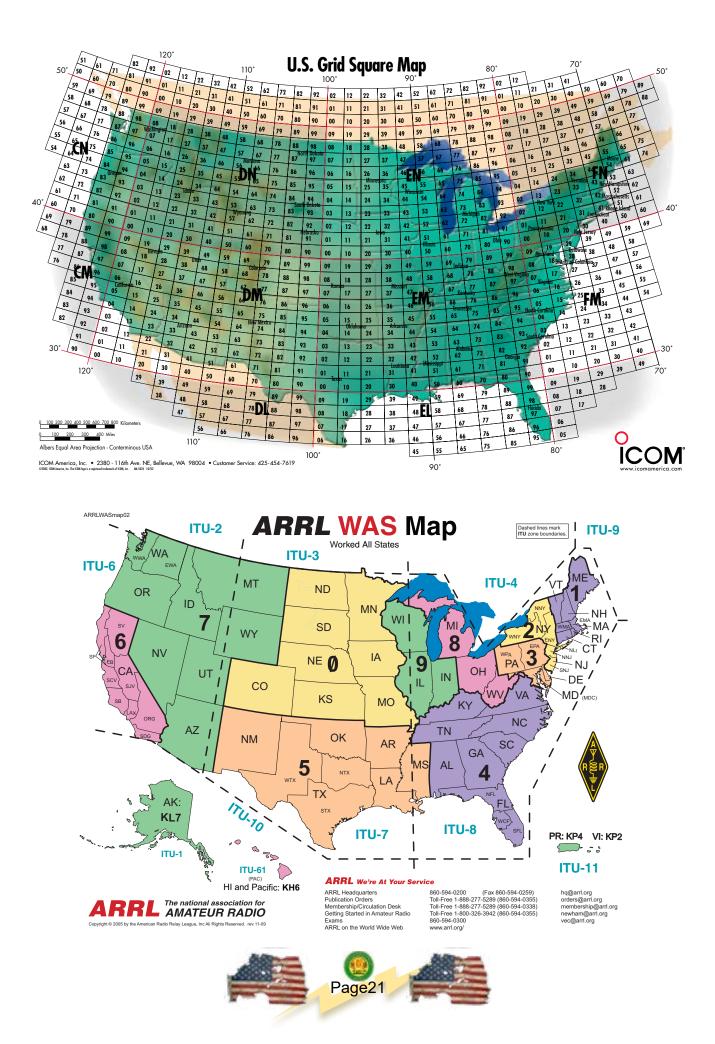
### ARES Resources

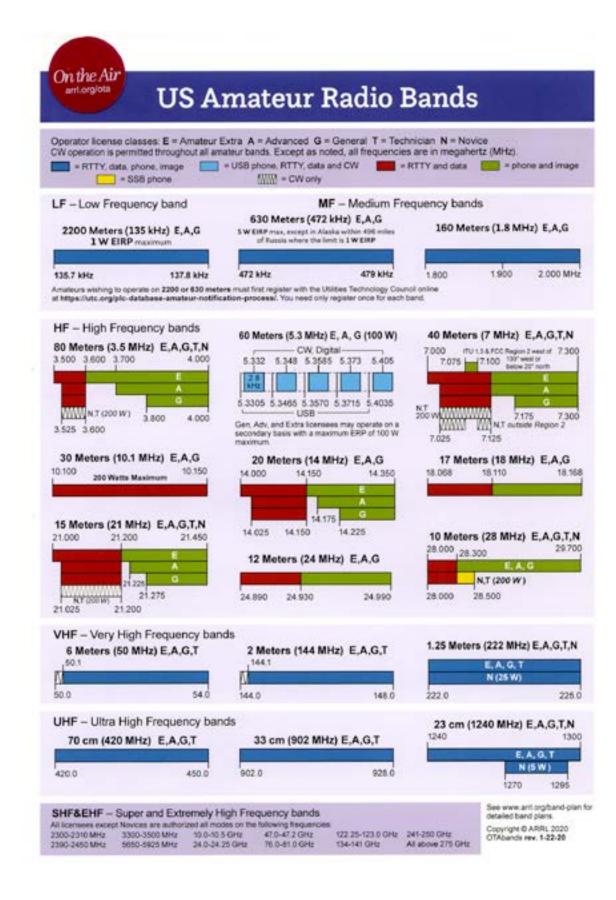
Download the ARES Manual [PDF]

- · ARES Field Resources Manual [PDF]
- <u>ARES Standardized Training Plan Task Book [Fillable PDF]</u>
- <u>Emergency Communications Training</u>













447.725 MHz: Your Lister (Repeater Transmit) 442.725 MHz: Your Talk (Repeater Receive)





#### FRRL Repeaters- W9CEQ

<u>147.225 MHz</u> - Plano Mode: Auto C4FM / Fusion, FM, Wires X +600 KHz Offset, 100.0 Access Tone

<u>147.21 MHz</u> - Elburn Mode:FM (Echolink Available)W +600 KHz Offset, 103.5 Access Tone

444.300 MHz - Elburn Mode: FM +5 MHz Offset, 114.8 Access Tone

<u>223.86 Mhz</u> - Aurora Mode FM -1.6 Mhz Offset, 110.9 access Tone

<u>442.10625 MHz (B)</u> - Elburn Mode: D-Star +5 MHz Offset

> Other Area Repeaters W9XA

53.910 - Batavia -1.0 MHz offset PL 114.8 Hz

224.4 MHz - Batavia -1.6 MHz offset PL 103.5 Hz

<u>443.64375 MHz</u> - Elburn +5 MHz offset DMR 311759

<u>443.65625 MHz -</u> Plano +5 MHz offset DMR 311760

<u>1292.00 MHz</u> - Batavia -20 KHz 114.8 Access Tone

<u>927.625</u> - Batavia +25 MHz offset PL 114.8 Hz

#### <u>W9DWP</u>

<u>145.270 MHz</u> - Elburn -600 KHz offset PL 107.2 ARES APCO P25 NAC 293



#### NIARC W9ZGP

<u>147.06 MHZ</u> - Batavia Mode FM +600 kHz offset PL 103.5.

Auto C4FM / Fusion, FM, Wires X Repeaters

#### <u>K9IIK/R</u>

<u>442.275 MHz</u> - Schaumburg Mode: Auto C4FM / Fusion, FM, Wires X +5 MHz, 114.8 Access Tone

#### <u>W9CHI</u>

<u>444.600 MHz</u> - Channahon Mode: Auto C4FM / Fusion, FM, Wires X 30024 +5 MHz, 136.5 Access Tone

#### KD9FA

<u>443.600 MHz</u> - Oswego Mode: Auto C4FM / Fusion, FM, Wires X +5 MHz, 107.2 Access Tone

KC9OEM Primary Kane County SKYWARN / ARES

<u>145.470 MHz</u> -St Charles Mode: FM -600 Offset, 103.5 KHz Access Tone



<u>444.525 MHz</u> -St Charles Mode: Auto C4FM / Fusion, FM, Wires X +5 MHz Offset, Access WWTone114.8

